

## Claims

1. An optoelectronic dust collecting machine for killing bacteria, viruses with a streamlined structural body comprising:

A draft fan, an electric motor, a circuit board, an electronic circuit element, a switching push button, an indicating lamp, a hand handle, an externally mounted long movable handle, an extreme ultraviolet ray transmitting tube, a filter screen, a chargeable battery, a power input line, a transparent transmitting mirror, a garbage box body, and an externally mounted movable vacuum cleaner.

2. An electronic circuit system for improving the indoor environment, and especially applicable for purifying the indoor air, wherein in the said electronic circuit system, the extreme ultraviolet ray transmitting tube produces a circuit for starting ultraviolet ray of 253.7 nanometer wavelength.

3. The electronic circuit system according to claim 2 wherein the rheostat for the extreme ultraviolet ray transmitting tube to produce a circuit for starting ultraviolet ray of 253.7 nanometer wavelength serves to adjust the current output value.

4. The electronic circuit system according to claim 2 wherein the extreme ultraviolet ray transmitting tube is ignited to radiate ultraviolet ray for eliminating bacteria, viruses contained in the air flowing through the said tube.

5. The dust collecting machine according to claim 1, wherein the handle is attached to the upper part of the machine body for the user to hold conveniently; the externally mounted long handle can also be attached at the trailing end of the machine body so as to provide an another way for the user to hold.

6. The dust collecting machine according to claim 1, wherein the machine body can be separately held for use, and the body can also be connected with the externally mounted long handle for use together with the externally mounted movable cleaning head, which can be freely adjusted to any angle, and which can slide close to the floor surface at any angle.

7. The dust collecting machine according to claim 1, wherein the machine body and the movable cleaning head each has a separately built-in extreme ultraviolet ray transmitting tube.

8. The dust collecting machine according to claim 1, wherein the extreme

ultraviolet ray transmitting tube has a separate transparent transmitting mirror protection and a penetrable transmitting mirror radiating extreme ultraviolet ray.

9. The dust collecting machine according to claim 1, wherein the filter screen can be cleaned and replaced.

10. The dust collecting machine according to claim 1, wherein the machine can be powered by a chargeable battery or by an external municipal power supply line.

11. The dust collecting machine according to claim 1, wherein the chargeable battery in the machine body can be charged from an external power supply socket.

12. The dust collecting machine according to claim 1, wherein the garbage box body and the movable vacuum cleaner each has a power contacting part made of metal materials, by which the machine body can get the power supply to ignite the extreme ultraviolet ray transmitting tube.

13. The dust collecting machine according to claim 1, wherein the built-in extreme ultraviolet ray transmitting tubes within the garbage box body and the movable vacuum cleaner can be replaced by new ones.